

Evolution of Brahmi Script From Indus Script

Somesh Chandra Shrivastava

Abstract: The Brahmi script which is well deciphered by Sir James Princep is well connected with Indus script which possessed 417 signs referring to crop and share of the agricultural produce and business. Few of those signs when halved horizontally resulted into certain Brahmi letters (Chart 1). Few other signs when halved vertically resulted into another set of Brahmi letters illustrated in Chart 2. A list of signs of the Indus script depicting various household agricultural implements and hunting gadgets converted to Brahmi script as a whole are included (Chart 3).

Key words :-horizontally halved hieroglyphs, vertically halved hieroglyphs ,full hieroglyphs

Introduction

Writing system in Indian subcontinent started with cave wall picture writings of Chunargarh and Bheembetka culminated to develop Indus Seals containing signs convenient to control the apportionment of grain right at the threshing floor. Sheaves of grain-stalks would have been bundled into lots and marked with clay-tags that were then impressed with seals to identify ownership before the grain was transported to granaries or taken away by landlords as their share, leaving the rest as the share of tenant-farmers or

wages to the cultivators. Later they became business seals containing names of cities where goods were transported. As one seal reads Harapame meaning belonging to Harapam old name for Harappa.

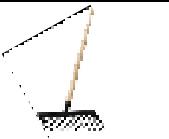
It is here to note that all Indian and east Asian scripts are derived from Brahmi Script. I have tried to fix the relation of pictures with pictographs deciphering it as logically derived to form the script which directly correlates to house hold articles of agriculture and hunting equipment present in Indus era. Here is my elaborated system of evolution of articles to Indus hieroglyphs which in turn transformed to Brahmi syllables. This clearly indicates that to develop one script language is required along with sketches of articles present in that time frame and that area. Script never dies of instead it changes its presentation. So for decipherment of any script it must be correlated to script and languages presently available in the precinct. Because present script and languages are evolved from the old languages and scripts. In this regard I humbly present my observations on INDUS Seals and their script. Many Brahmi letters when added with its mirror image form the hieroglyphs depicted in Indus Seals.

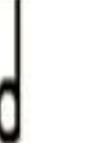
Methodology

Brahmi script was well developed in 3rd century BC in Pali language which is derived from Samskrit language. In this regard The proposed interpretations are based on the pictorial character of the signs and their probable functions as determined in the Samskrit Dictionary of Vaman Shivram Apte for the articles which resemble with the shape of their first letter in Brahmi to find pictographic precursors of Brahmi. The results were astonishingly similar to pictographs depicted in Indus seals. There are few Hindi letters still taught in basic education course with same pictographs as in Indus signs like Kha for kharal (Mortar), Dha for Dhanush(Bow), Pa for Peepal, Ma for Machhali(Fish), Ra for Rassi(Rope) and Ya for yajna.

Horizontally Halved Hieroglyphs

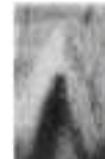
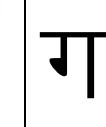
Chart I illustrates a set of signs when reduced horizontally resembled certain Brahmi letters

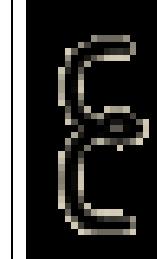
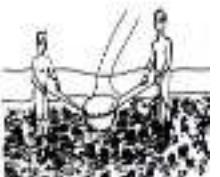
Picture	English Name	Samskrit Name	Indus Hieroglyph	Halved Hieroglyph	Brahmi Letter	Devnagari Letter	Discription
	Lancet	Eshanah					<p>This is picture of arrow and was also used in olden days for hunting with bow. Earliest settlements of humans were as nomadic hunters. Like many tribes of bastar and Andamaan Nicobar islands. This is lancet or arrow tip preserved from indus articles. This is called as Eshanah in samskrit meaning arrow. This is common sign found on many Indus seals. This hieroglyph represents letter Brahmi e.</p>
	Rake	Nirdatram					<p>A toothed head fixed to the end of a long (wooden) pole used for raking grain-sheaves and hay-stacks. The sign is near-identical with the Early Sumerian sign gal. Its halved hieroglyph forms Brahmi Na</p>

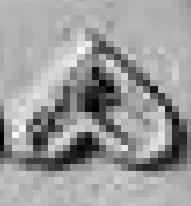
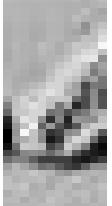
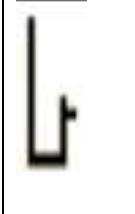
	Conch Shell	Shankhah					This is a picture of conch shell recovered as Indus articles named shankhah in samskrit representing Sha
	Fish	Meenam					This is a picture of fish named meenam in samskrit representing Ma.
	Eye of Peacocks Feather	Chandrakah					This is a picture of peacock tail feather's eye known as chandrakah in samskrit and represents Brahmi Cha
	Bellow	Bhastrih					This is a picture of bellow used by blacksmiths to enhance the fire named bhastrih in samskrit represnting Bha
	Bearer	Tuladhrah					This is picture of bearer named in samskrit as tuladharah. the hieroglyph for tuladhar depicting Ta (dantavya).

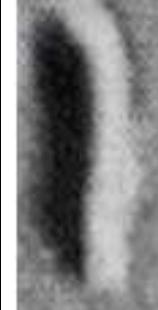
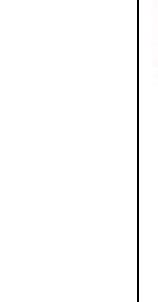
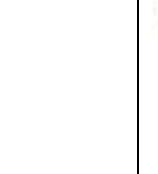
Vertically Halved Hieroglyphs

Chart 2 illustrates certain Indus signs when vertically halved develop into Brahmi letters

Picture	English Name	Samskrita Name	Indus Hieroglyph	Halved Hieroglyph	Brahmi Letter	Devnagari letter	Description
	Hill	Girih					This is small hill named girih in samskritaThis is hieroglyph for giri represnting Ga in Indus script
	Spider	Urnaphadah					This is picture of spider called urnnabhah/urnaphadah in samskrit depicting letter U

	<p>Window Jalakam</p>				<p>ज</p>	<p>This is picture of window named jalakam in samskrit. Hieroglyphs for window in Indus script. Depicting Ja .This halved hieroglyph transforming to Brahmi Ja</p>	
	<p>Irrigation Swinging Basket</p>	<p>Dronih</p>				<p>द</p>	<p>This is a method by which water is lifted by means of a basket from the low channels or ponds which are by the side of the field. The basket is made of any cheap material for example leather, tin etc. The basket is slung by ropes on both sides Its samskrit name is Dronih representing Da(Dantavya)</p>

	Leaf	Parnah,Patram				ਪ	This is a sacred peepal leaf commonly known as parnah in samskrit representing Pa
	Jar Sign	Handikah				ਹ	This is a picture of pot of indus era named handikah in samskrit representing ha and visargah. Classical jar sign Its halved hieroglyph is developed as brahmi Ha. Also used as visargah

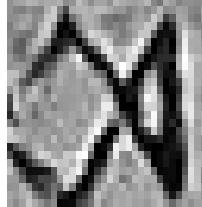
	Mortar	Khallah					<p>The sign depicts a mortar in which grain is pounded with a long (wooden) pestle. Large circular brick platforms, each with a central hole to hold a wooden mortar, have been discovered at Mohenjodaro and Harappa. In Hindu mythology, Balarama had also the pestle (musala) as his weapon. Its halved hieroglyph forms Brahmi Kha</p>
	Abacus	Ankgananakah					<p>This is abacus commonly known as ankgananakah in samskrit language. Many people think abacus is chinese</p>

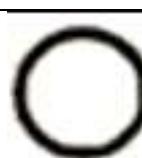
								<p>invention but its pictures in Indus seals speak about its Indian origin. This is the picture of abacus as depicted in Indus script and was used to represent anunasik letter of Cha varg</p>
	Wings	Dayanam						<p>This is hieroglyph for Birds wings meaning of dayanam in samskrit that is wings of birds representing da (talavya)</p>
	Vulva	Sambadham						<p>This is picture of vulva named sambadham in samskrit representing s. Its halved hieroglyph forms Brahmi Sa.</p>

	Cross Road	Swastikah					This is picture of cross road named swastikah in samskrit representing s. Its halved hieroglyph forms Brahmi Sa
	Plough	Langalam					The sign depicts a plough with a yoke. It has been recognised from a comparison with the near-identical sign for the plough in the Early Sumerian script. In Hindu mythology, Balarama has the plough as his weapon (Halāyudha).

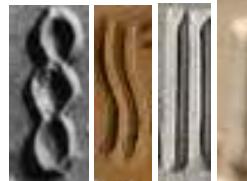
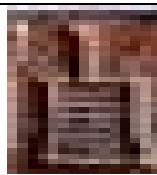
Full Hieroglyphs

Chart 3 shows set of Indus signs which are direct precursors of Brahmi letters

Picture	English name	Samskrit name	Indus Hieroglyph	Brahmi Letter	Devnagari Letter	Description
	Prod	Ankushah				Ankushah is the article used to tame elephants and was prevalently available in Indus era. Pictograph derived from this developed hieroglyph for Indus Aa
	Bee	Indindirah				Indindirah is samskrit name for honeybee . Which represents letter Ee of Indus hieroglyph. In Tamil fly is called EE
	Human figurine	kalevaram				This is human figurine representing Ka.This is human figure found on some seals.
		Ghatikam				Ghatikam in Samskrit is meant for buttocks with natal cleft. Brahmi Gha

	Mushroom	chhatrakam				This is picture of mushrooms named chhatrakam in samskrit. Representing Chha.
	Beetlenut Tree	Jhodah				This is a picture of beetle nut tree named jhodah in samskrit representing Jha
	shape of axe	Tankah				This is a picture of an axe named tankah in samskrit represening Ta (talavya). This is similar to English alphabet C.
	Waist Belt	Thalini				This is picture of waist belt known as thalini in samskrit representing Tha (talavya).This is represented by circle
	Lord Ganesha	Dhundhiih				This is picture of Lord Ganesha named Dhundhiih in Samskrita whose pictograph hieroglyphs

						transformed to brahmi Dha(talavya).This is brahmi Dha
	Shield of warriers	Tham		•	ঢ	This is a picture of shield of defence named tham in samskrit representing Tha (dantavya).
	Bow	Dhanvah		D	ঢ	This is archery bow used for hunting in Indus era named dhanvah in samskrita representing Dha(dantavya).
	Cobra	Phaninah		ঞ	ঞ	This is a picture of cobra named phaninah in samskrit representing Pha
	sacred Ritual fire	Yajnah		↓	য	This is a picture of sacred ritual named as yajna in samskrit representing Ya.These are pictures of fig leaf and fig twig named yajniyah in samskrit representing Ya

	Rope	Rajjuh				This is a picture of rope named rajjuh in samskrit representing Ra These are chronological hieroglyphs representing development of script depicting Ra
	Hand Fan	Vyajanam				This is picture of fan named vyajanam in samskrit representing Va

Discussion

Human civilization was well developed in the Indus Saraswati settlement evolving from nomadic hunters to well developed agriculture fortified with ploughing and irrigation tools. Since first publication of Indus seal by Alexander Cunningham 1875 many efforts have been made by scholars to decipher its language and script

Mr. Irawathan Mahadevan 1977 has worked on earlier described few signs and tried to work on pictures depicted in seals and tried to decipher agricultural signs. He published a corpus of 3700 seals with 417 signs. Asko Parpola 1994 described some seals correlating with tamil language and described certain numeral seals as cryptic writing like numeral three with fish sign as pliedes mrigsiras Nakshatra. Numeral six with fish sign as kritika Nakshatra and numeral seven with fish sign as ursa major on lines of Dravidian hypothesis.

Whereas Sinha et al described various letters as complex samskrita vyanjanas like ndra , pri etc.. whereas

Mr. Natwar jha And N S Rajaram 2008 tried to explain various letters differently on the basis of samskrit verses . Dr.K.S.Shukla tried to decipher certain scripts as samskrita verses.

Many scholars like G.R.Hunter 1934 , S.R.Rao1978, John Newberry 1980 , Krishna Rao 1982and Subhash Kak 1990 Argued some connection between Brahmi and Indus Script. It is here to note that all Indian and east Asian scripts are derived from Brahmi Script. But none of above tried to fix the relation of pictures with pictographs deciphering it as logically derived to form the script which directly correlates to house hold articles of agriculture and hunting equipment present in Indus era.

Since the evolution of telencephalon in human brain it enhanced the analytical power of various observations perceived by our sense organs leading to adaptation and surviving adverse conditions.

- In this process it was essential to communicate the observations to fellow brethren to exert cumulatively for survival. First mode of communication was sign language.
- Subsequently the sound produced by larynx modulated with the help of tongue teeth palate and lips created a variety of phonetic notes, which were later divided as below
- 1 .**Kanthyā.** All vowels along with ka varg ya and ha , which were spoken only by laryngophayngeal modulations .(अ आ इ ई उ ऊ औ औं अं अः क ख ग घ ड य)
- 2. **Dantavyā.** These include cha varg and ta varg ra and sa these letters are spoken by tongue touching the teeth. (च छ ज झ ज त थ द ध न र स)
- 3. **Talavyā** . These include t varg and la and sha. These letters are spoken by tongue touching hard palate. (ट ठ ड ण ल श ऋ)
- 4. **Oshthya.** These letters are spoken with the help of lips include pa varg and va. (प फ ब भ म व)
- 5. **Murdhanya** sha and lra (ष ळ) only two letters spoken by tongue touching soft palate.
- These notes when spoken in combination by natural law developed language which was samskarit by vyakaran is known as **SAMSKRITA**. All other languages widely classified as **Indoaryan** (Indian and

east asian languages) and **Indosemitic** (western languages of greeko-roman origin) are evolved from **SAMSKRITA**

- The third mode of communication was developed by Artists who used to sketch their visual observations in the form of linear diagrams known as **pictographs**. These pictographs when organized in the form of language were known as **SCRIPTS**. These scripts are classified as **monosyllabic** pictographs as Egyptian Hieroglyphs Brahmi script Japanese (Hiragana and Katakana)or **multisyllabic** pictographs as Chinese Korean and Japanese(Kanji) scripts. Another script decoded in the form of **cuneiform** script is also monosyllabic in nature.
- This clearly indicates that to develop one script language is required along with sketches of articles present in that time frame and that area. Script never dies of instead it changes its presentation. So for decipherment of any script it must be correlated to script and languages presently available in the precinct. Because present script and languages are evolved from the old languages and scripts.
- In late Indus script vowels got symbols attached to consonants or beside it. These were similar to vowel configuration of early brahmi script.
- There are monosyllabic seals, bi syllabic seals , tri syllabic seals and multi syllabic seals with samskrita and prakrit languages.

Conclusion

All Indian and south east Asian scripts are evolved from Brahmi script which is derived from Indus script which is developed from pictographs of house hold utensils and agricultural tools. Below is the evolution tree of all scripts. This book is a work to establish link between Indus and Brahmi. Brahmi Script in North India was written on Bhojpatra lead to Gupta script with spread of ink in horizontal lines whereas South Indian scripts were written on Tadapatra with spread of ink in circular veins of Tadapatra leading to circular formation of script.

Bibliography

- 1-Cunningham, Alexander (1875). Harappa. Archaeological Survey of India: Report for the Years 1872-3
- 2-Hunter, G.R. (1934), The Script of Harappa and Mohenjodaro and Its Connection with Other Scripts
- 3-Indus script monographs - Volumes 1-7 1980, John Newberry

4-Parpola, Asko (1994), Deciphering the Indus script Cambridge, New York

5-Rao, S. R. The Decipherment of the Indus Script 1982

6-Natwar Jha, Navaratna Srinivasa Rajaram8 May 2008
The Deciphered Indus Script

7-Kak, S.C. 1990. Indus and Brahmi: Further Connections

8- Agricultural Signs in the Indus Script Iravatham Mahadevan

Dr.Somesh Chandra Shrivastava

B.Sc.,M.A.(History)M.B.B.S.,M.S.(ENT)

Chief Medical Superintendent

Government Medical College Basti

drsomesh.shrivastava@gmail.com

Mobile 9319038847,7309971040